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ABSTRACT

This study discusses six specific strategies that teachers can use to improve elementary students' reading comprehension. First, teach the students to use context clues as one vital part of the decoding process, in order to improve comprehension. Second, increase students' depth of comprehension by triggering discussion of materials they have read with questions which call for them to make inferences from--and evaluations of--that material. Third, provide planned exercises in listening over a sustained period of time. Fourth, provide cloze exercises and discuss with students who are low achievers the logic behind the choices of words that were made to fill in the blanks. Fifth, have students make mental images as they read. Sixth, provide planned instructional activities which help students understand connectives and how they influence meaning. (MB)

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TEACHING STRATEGIES FOR DEVELOPING COMPREHENSION ABILITIES

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Although almost everyone agrees that a major goal of reading instruction -- if not THE major goal -- is to develop reading comprehension, the number of specific, worthwhile suggestions about how we should do it is amazingly limited. The lack of specific suggestions may be partially because our job in promoting comprehension abilities is never done. In teaching phonics to one of our students, we may reach a time when we sigh with relief and say to ourselves, "Thank God, I've worked with Sam through twenty-seven migraines, but he can finally use all of his letter sound associations." But there'll never be a time when we can say that Sam or any other student knows everything they will ever need to know for the rest of their lives about comprehending what they read. The possible comprehension tasks are as infinite as human capability for thought and the ability to write down those thoughts -- which is to say, limitless.

As we try to improve comprehension, let's face the fact that an individual's power to comprehend depends upon many variables, some we can teach, some we can influence, and some we simply

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have little or no control over. For example, one factor that we can influence only over a long period of time is the reader's overall knowledge and cognitive abilities as these interact with the content of a reading selection. This content must somehow relate to a background of understanding that the reader already has; otherwise reading comprehension cannot take place. Certainly we can learn something new as we read, but only as new insights are shed on previous knowledge or as new relationships are explored among ideas and concepts that we already have.

In addition to the content of a reading selection, the way that an author expresses his ideas can directly affect the reader's ability to comprehend. For example, active versions of sentences are more likely to be understood quickly than passive versions and authors can provide linkages and clue words which enhance our comprehension. Unfortunately, however, some authors seem bent on deliberately making themselves hard to understand, and there's little that we can do about that. Let me share one of my favorite examples with you. It's from a review of Joseph Heller's book, Something Happened. The review was written by a professor of English, no less, at the University of Michigan and appeared in the October 19, 1974, edition of the Saturday Review. Here is just ONE sentence from the good professor's article.

The size of Heller's achievement is perhaps best demonstrated by his success in coming to terms with what is unquestionably the most difficult problem facing the American novelist today: how to give dramatic life and, above all, dramatic concreteness to individual experience at a time in our cultural history when the most urgent awareness is of the undramatic nature of individual experiences, and when the typifying obsession stemming from that awareness is with abstract states of consciousness -- shifting and largely morbid psychological moods, anxieties arising out of a pervasive sense of the running out and running down of vital energies, entropic processes in society and within the self, the collapse of moral and social structures that once helped to give purposes and continuity to the individual life and provided the novelist with readily dramatizable materials.

If you had any difficulty at all comprehending that sentence, I suggest that it's not because you lack background, cognitive abilities, or comprehension skills. It's because some professors of English insist on writing sentences that are 135 words long, and, as teachers of reading, there isn't much that we can do about that.

So, let's be realistic about what we can't do. We can't, for

example, teach comprehension skills which will enable a reader to comprehend materials for which that reader has absolutely no background of understanding. And we can't teach skills which will enable a student to readily comprehend material written by an author who seems suicidily bent on writing in an obtuse way.

Despite our limitations, there are some things that we can do with our pupils to increase their reading comprehension. We aren't powerless, and we can turn to some sound research studies to see where our power lies.

Before exploring what we can do in the classroom, let's make a distinction between two possible goals we might have as we discuss comprehension. One goal might be to work with children so they can understand a specific piece of written material with our help. You might do this to help them master the content in a specific science text, or a geography text, or a history text.

A second possible goal could be to provide experiences for the pupil which are aimed, not at mastering the specific reading content with which you're dealing, but which are aimed at developing the pupil's ability to better comprehend any printed material that he reads. In striving to achieve this goal, you

aren't concerned that he master the content of the reading selection that you're using at the time, you're concerned that he develop a greater and greater ability to comprehend anything that is read. These are the kinds of things that I want to concentrate on today -- the kinds of strategies that might be used in any good developmental reading program to improve all comprehension.

For each instructional strategy suggested, we'll examine some of the research which proves its effectiveness. Then, for each one, we'll explore precisely what this research means for classroom practice. Then, at the conclusion of our time together, I'll try to summarize and make a generalization about how each teaching strategy that we discuss can improve reading comprehension.

First, in exploring what we can do to improve comprehension, I'd like to express a few kind thoughts about words. I fully realize that words have become much maligned by some psycholinguists and that the "in thing" right now is to contend that children should not try to be accurate in dealing with words. In one recent article defining reading from the psycholinguistic perspective, this statement was made, ". . . the reader who attempts to read for exact accuracy will usually be unable to comprehend" (34).

Although I realize that we can emphasize words to such an extent that comprehension is damaged, I think that it may be going a little too far to say that reading for exact accuracy will prevent comprehension. Tell that to the person who just sat down on the park bench because he didn't think that it was important to accurately read the sign on that bench that said "Wet Paint." Or the next time that you see printed messages saying, "Danger, High Voltage," or "Not to be used internally," or "Dangerous curve ahead," think about what might have happened if you had decided that it wasn't important to pay attention to individual words and so you read them "Doubtful high voltage," "Not to be used externally," or "Delightful curve ahead."

There is no doubt that we can make our children so word-centered they have difficulty comprehending. Constance McCullough (21) said it this way, "A word-centered reader watches the hole while the mouse gets away." But in our desire to stress the importance of the flow of printed language, let's not jump on that educational pendulum again which swings from one methodological extreme to the other. In our justifiable desire to avoid overstressing words, let's not avoid them entirely. Let's be sensible this time and realize that, while concentrating on individual words at the expense of comprehension can be harmful, ignoring the importance of words and the necessity

for teaching decoding skills can also be harmful.

When I rise to say a few words in favor of teaching effective decoding strategies, I sometimes feel like a layman at a preacher's convention rising to say a few words in favor of sin. In some circles "decode" is a four letter word -- only to be used on the walls of public toilets along with the other graffiti. I heard a leading spokesman for this group poke fun at teachers who "phonecate" their students. It got a laugh from his audience, but it didn't do much to tell teachers how to improve comprehension.

We don't need to rely on what someone thinks or theorizes about the importance of rapid word recognition or decoding ability as it relates to comprehension. We can rely on research. Seifert (26), for example, has shown experimentally that the ability to comprehend is directly related to rapid word recognition.

Golinkoff (11), in a recent comprehensive summary and analysis of research studies comparing the reading comprehension processes in good and poor comprehenders reached this conclusion, "In sum, the evidence suggests that poor comprehenders may possess inadequate decoding skills. Decoding tests using single words in isolation or in textual selections found that poor comprehenders

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make more decoding errors than good comprehenders." In short, students who know how to decode words are better at reading with comprehension. If you want to promote comprehension, you want to be sure that your students have developed decoding skills.

Golinkoff draws another conclusion from research which suggest that, not only are decoding skills important in promoting comprehension, but the KIND of decoding skills we teach may also influence comprehension. He says this, "Poor comprehenders are more likely than good comprehenders to produce errors that do not conform to the meaning of the selection and are more likely to fail to correct their inappropriate errors." In short, a poor comprehender is more likely to come up with a word that doesn't make sense -- one that doesn't fit the context -- when he makes a decoding error.

What does all of this mean for classroom reading instruction? It means this. If you're concerned with improving the abilities of your students to comprehend, first check to see if they have mastered the decoding skills which will enable them to deal with the words in the material that you want them to comprehend.

Since poor comprehenders are also more likely to make decoding errors which lead to words that do not make sense, the research

also means that your decoding strategies must involve having your pupils use the context -- the sense of what they are reading -- as well as the sounds letters stand for when they decode. As your children master phonics, don't put the word "look" on the board, and ask them to use the sound for l, one of the sounds they know for oo, and the sound for k to decode it. Put the word "look" on the board and provide this oral context, "When Jimmy heard the fire engine going down the street, he ran to the window and yelled to his Dad, 'Dad, come here and ----.'" When you come to the blank, simply point to the word look on the board. Have your children use the context -- the sense of what you said -- along with the sounds for the consonants in the word look to decode it.

They'll know the word is not see because, although see makes sense, it doesn't begin with the sound the letter l stands for. They'll know the word is not lake or like, because neither of those words makes sense. And, as they practice looking for sense as they decode, they will strengthen their abilities to derive sense from the materials that they read. They will become better comprehenders.

A second approach to improving reading comprehension involves asking our students questions about selections they have read which enhance higher level reading abilities. Helen K. Smith

(27) has found that teacher's questions and examinations are important determiners of the manner in which students read. If the teacher asks questions which call for simple recall only, the students are more likely to practice and become proficient in reading for simple recall, but not become proficient in reading for greater depth. As we ask questions, we are causing our pupils to develop the habit of reading for certain purposes -- the purposes represented by the kinds of questions that we use.

Related to this is Smith's additional finding that more than half of the questions asked by the teachers she observed were simple recall questions and Guzak's (12) finding that almost sixty per cent of the questions asked by the teachers he observed were simple recall questions.

The ability to make inferences does not grow automatically from the ability to read for simple recall. Pettit and Cockriel (23) assessed the literal and inferential reading comprehension of over 500 sixth graders and found that the test of literal reading comprehension and the test of inferential reading comprehension measured separate, distinct factors. Feinman (10) has shown, with second and third graders, that children score higher on test items which call for literal comprehension than they do on items which measure inferential comprehension.

He concludes that, since there is a distinction between literal and inferential comprehension, we cannot assume that a child who can comprehend literally will also be able to make inferences.

Let me try to illustrate the difference between, first, simple recall questions, second, questions which call for the reader to make inferences, and, third, questions which call for evaluation with an old poem that I learned as a child. I'm sure that you have heard it, too.

"Go to father," she said, when he asked her to wed.
But she knew that he knew her father was dead.
She knew that he knew the sinful life that man led.
So she knew that he knew what she meant when she said.
"Go to father."

A literal recall question about that might be, "What did the girl say when someone asked her to marry him?" In order to answer that, all you need do is repeat back the exact words from the poem, "Go to father." No deeper thoughts are required and the whole point of the poem would be missed at this simple recall level only.

A question requiring you to make an inference might be, "What

did the girl really mean when she said, 'Go to father'?" To answer that, you must go beyond what the author said to what he wanted you to understand without actually saying it. You had to infer from what the author said that the girl was telling the man to go to the place where sinners go when they die.

A question requiring you to make an evaluation might be, "What do you think the man should have done when she said that?" To answer that question, you not only have to make the correct inferences, you also call upon your own experiences, beliefs, and opinions. And there is, of course, no single, correct answer.

There should be no confusion about the fact that all students, not just our brighter ones, can and should go beyond answering simple, literal recall questions. Some instructional materials which offer questions to be asked after students have completed reading a selection suggest that only top students can deal with higher level questions. The implication seems to be that your top reading group, the Bluebirds, can be asked questions calling for evaluation, your middle group, the Robins, can be asked questions calling for inferences, and your bottom group, the Impossibles, should be limited to recall.

It would be a mistake to assume that intellectual ability, or

the lack of it, should determine whether or not we deal with comprehension questions beyond the literal recall level. Wolf, King, and Huck (35) have shown that pupils do not have to be gifted to think critically about what they read. Covington (8) found that fifth graders with I.Q. scores below 100 were not specifically handicapped in what was termed "creative understanding." Caskey (4) concluded that, providing the materials are at the child's reading level, higher level comprehension is more dependent on how we teach than on the pupil's intellectual ability. Pupils of all intellectual abilities can deal with and should be asked questions about what they have read which go beyond literal recall.

Two other studies have suggested an added twist to this questioning process which is seldom used by teachers. Both of these studies conclude that, when students, as well as teachers, formulate questions about the materials they've read, their comprehension will improve.

In the first of these studies, Manzo (19) found that students' comprehension improved significantly when they, as well as the teacher, were involved in formulating questions about materials they read.

Support for this is found in a later study by Helfeldt and

Lalik (13). In a fifth grade control group, students read a selection and were then asked questions about it. The procedure with the experimental group was identical with one exception. In the experimental group, when the students answered the teacher's question correctly, they then got to ask a question about the reading selection themselves. They could ask their questions either of the teacher or another student. After a brief time, it was found that the students who asked questions as well as answered them were significantly superior in responding to interpretive questions when they were compared with the students who simply answered questions.

What does this research about the effects of questions on promoting comprehension mean for actual classroom practice? There are several important implications. First, since the kinds of questions we ask students about materials they've read condition them to read for the kinds of purposes our questions represent -- simple recall, inferences, or evaluations -- we must be sure that the questions we ask represent these three levels of thought and are not limited to simple recall only.

Second, all of our students, not just the brightest ones, can read beyond the simple recall level and should be required to do so if we want to develop higher level comprehension abilities.

Third, pupil's comprehension abilities will improve significantly when they, as well as the teacher, are involved in formulating questions.

A third approach to improving reading comprehension involves planned exercises in listening over a sustained period of time. We often read aloud to students simply because they enjoy it or because we hope that it will make them want to read for themselves. But does this reading aloud to students have any ancillary benefits?

We can better understand the results of the research which answers this question if we first understand the degree of commonality between listening and reading. Mosenthal (22) has shown that a common linguistic competency underlies both silent reading and our ability to process oral language as we hear it. Weintraub (33), in summarizing a number of studies dealing with listening and reading, concluded that the receptive processes of communication are involved in both listening and reading, that each seems to be a complex of related skill components, and that the same higher mental processes underlie both.

It is not surprising then, to find many studies supporting listening exercises as a way to improve reading comprehension.

Taylor (30), working with third grade children, found that they made significant gains on standardized reading achievement tests after being exposed to listening periods of fifteen to twenty minutes each over a thirty week time span. Although there were no differences in the gains made between boys and girls, children in the lower and middle achievement groups seemed to profit most from planned listening activities. Lewis (18) worked with intermediate grade children in fifteen minute listening periods for just six weeks. He found that training in listening for general significance, details, and to predict outcomes led to significant increases in reading in those three areas.

VanValkenburg (31) worked with children at several different grade levels and found that listening exercises were effective in increasing both listening and reading comprehension. He also noted that students classified as low socioeconomic status gained more from the listening experiences than students classified as high socioeconomic status.

Sandra McCormick (20), in a paper published just this year, summarized a large number of studies dealing with what happens to children's reading comprehension when they are exposed to regular and sustained periods of being read to. Her summary conclusively shows that reading aloud to students plays a significant role in improving their reading comprehension. When students have a sustained program of being read to, their reading

comprehension increases.

Her summary shows this to be true through all elementary grades; however, the effect on reading comprehension seems to vary with different classifications of pupils. For example, there is some evidence that, although all children benefit, those children who are lower in academic achievement benefit more from being read to than children who are higher in academic achievement. In addition, those children from homes of lower socioeconomic status seem to benefit more from being read to than children from homes of higher socioeconomic status, particularly in the lower grades.

She also concluded from research that the regularity of hearing stories read and the duration of the treatment seem to be factors related to reading growth.

What are the classroom implications of this research? You can significantly increase your children's reading comprehension abilities by providing regularly scheduled listening periods for them. The benefits in reading comprehension from these listening exercises apply to all pupils; however, they're particularly marked for students of low academic achievement and for students from lower than average socioeconomic status homes. If you have any slower learning children or low

socioeconomic children in your room, then, it would be particularly helpful to them if you regularly schedule listening periods.

In addition, we have some guidelines which can help insure that we provide the most profitable kinds of listening periods. As Schell (25) suggests, listening exercises must be systematic, organized, and long-term. In other words, they should not be just a when-I-have-time-I'll-do-it sort of thing. Plan these in advance, carry them out over the entire year, and you will see your pupils' reading comprehension improve.

Besides, Bursuk (2) has shown that the material you read to your pupils should be the same style and/or content to which transfer is expected, and the same comprehension skills should be stressed. This has two implications for what you do. First, you select materials to read to your students that parallel the kinds of materials you want them to be able to read with comprehension. If you want to improve their reading comprehension of stories, read them stories; if you want to improve their reading comprehension of content materials, read them content materials. Second, a listening exercise will be most beneficial if you follow it with a discussion using the kinds of questions which promote the purposes for reading that you want to improve. For example, if your students are particularly weak in reading

for main ideas, after reading something to them, discuss it with questions which call for them to select main ideas. If your students are particularly weak in making inferences from what they read, after reading something to them, discuss it with questions which call for them to make inferences.

For example, at the first grade level, you might read the poem "The Little Raccoon" to your children and tell them that, when you finish reading it, you're going to ask them what kind of a person the woodsman mentioned in the poem was.

The little raccoon
Looked at the moon,
From his home in the old hollow tree;
The wind, warm and light,
Blew soft in the night
And the woods were as still as could be.

The little raccoon
Smiled back at the moon,
For contented and happy was he;
The woodsman that day
Had seen him at play
And his axe never touched the old tree.

The author doesn't tell you directly, but, from what he does tell you, what kind of person do you think the woodsman was?

'Or take Langston Hughes' famous poem, "Still Here," which would be appropriate for upper grade students.

I've been scarred and battered.

My hopes the wind done scattered.

Snow has friz me, sun has baked me.

Looks like between 'em

They done tried to make me

Stop laughin', stop lovin', stop livin' --

But I don't care!

I'm still here!

After reading this to your children ask them what kind of person the poem is about. What can they tell about that person as a result of hearing just those few lines?

A fourth approach to improve reading comprehension is to use the cloze procedure with your students. The cloze procedure, as you know, involves deleting words from sentences or longer selections and having the reader supply the words you have deleted using context alone. Although the research evidence on using cloze as a way of improving comprehension is not

completely conclusive, there is reason to believe that cloze could be helpful when wisely used.

For example, in 1973, Kennedy and Weener (14) trained third grade pupils on cloze tasks. They used only pupils who were reading below their grade placement and the materials used for the cloze exercises were at the children's independent reading levels.

After having these children work with cloze materials for only five, separate, twenty-minute sessions, the researchers found that the cloze trained children were significantly superior in reading comprehension to control children who had not received the training.

The results of this study are in agreement with those of Best (1) who also found that underachieving children improved significantly in reading comprehension when they were trained with cloze exercises.

What are the classroom implications for this research? Since other research we have quoted has shown that good comprehenders are already good at using context, it may be that cloze exercises -- which basically give practice in using context to determine unknown words -- may be most useful for our students

who are low in comprehension abilities.

Schell (25) suggests certain guidelines when using cloze to improve comprehension.

First, as with all lessons, begin with simple materials until the students fully understand the procedure. Then advance to increasingly more difficult exercises. Do not go to a higher readability level, however, until the student has shown mastery at the present level by attaining approximately 95 per cent accuracy.

Second, it's not necessary to delete words randomly when using cloze as a teaching procedure. Instead, begin by deleting only nouns and verbs which are the easiest to supply and then progress to other parts of speech.

Third, do not expect or demand that students supply the exact word that has been deleted. Any word will do.

Fourth, and last, provide feedback to pupils so they can determine immediately how they did. With older pupils this could involve independent practice with self-checking cloze materials that you've prepared for them. The feedback, however, should frequently involve pupil-teacher interaction about

their responses. Instead of simply finding out whether a response is right or wrong, it's much more beneficial to the pupil to go back over the materials and have them analyze the clues which led to the responses.

You could for example, duplicate and give to your students a story which begins like this:

Billy Kidwell wouldn't ride his little, old bike anymore. He stuck it way back in the _____, behind some piles of old toys and busted furniture, and he wouldn't even _____ it to the store to get a _____ of bread for his mother.

After your students have filled-in the blanks, with words such as garage or basement in the first blank, words such as take or ride in the second blank, and probably the word loaf in the third blank, discuss with them why they used the words that they did to put in the blanks. The discussion will force both you and the students to get a deeper understanding of how words and thoughts relate to each other in a reading selection -- an understanding which can transfer and build comprehension in everything that is read.

A fifth approach to improving reading comprehension is to have your students make mental pictures as they read. Kulhavy and

Swenson (15) have proven that intermediate grade pupils who do not have a deficit in vocabulary and/or decoding skills will be significantly superior in comprehension and recall of information when they're simply told to think of a picture in their mind's eye -- that is, make mental pictures -- as they read. Levin (17), in a 1976 IRA book, summarizes a wide variety of research which shows that having students make mental pictures as they read improves their comprehension and recall.

Although this seems to work most effectively with materials dealing with persons, places, and things rather than abstractions, most of the materials that we read are about persons, places, and things.

Let me ask you to share in the mental processes involved by using a couple of passages from John Cheever's recent book, Falconer. The leading character is named Farragut. He is in prison. Now make a mental picture in your mind as I read just this one sentence to you.

"Farragut stood at his prison window and watched the black birds cross the blue sky above the walls."

Do you have a mental picture of that scene? Since you may have

only limited information about the total story, your mental picture may differ in some respects from mine, but your mental picture enables you to make immediate associations between the things mentioned in that sentence. Farragut, the window, the black birds, the blue sky, and the walls. This becomes not just a listing of separate objects, they relate to each other when you make a mental picture of the scene.

This is such a well done book, let me use just one more example, except this time your mental picture will have to encompass more than a single scene. When Farragut and his brother Eben were quite young, their mother drove them one day from their home to a country club they belonged to. Heever describes it in three sentences.

"Mrs. Farragut was not an intentionally reckless driver, but her vision was failing and on the road she was an agent of death. She had already killed one Airedale and three cats. Both Eben and Farragut shut their eyes until they heard the sound of the gravel on the club driveway."

Did you make a mental picture from that passage? If you did, you probably were able to make a lot of inferences from it - - things that the author wanted you to understand without actually telling you. Since Mrs. Farragut's vision was failing, can you

picture the way she was probably peering out over the steering wheel? Can you picture the expressions on Eben's and Farragut's faces during that ride? Can you picture the probable path of the car itself as it went down the road with Mrs. Farragut at the wheel?

Research shows that pupils will comprehend a given selection better when they're simply told to make mental pictures as they read it. It's not clear, however, whether this making of mental pictures as they read transfers from the teaching situation to other reading situations in which we are not present to tell pupils to make mental pictures.

One study, reported by Lesgold, McCormick, and Golinkoff (16), third and fourth grade students were trained to use mental imagery by drawing cartoons to illustrate something they were reading. These experimental students were significantly superior to control students on a paraphrase recall test, but only when they were instructed to use visual imagery on the test.

This study, however, took place for only one month and there is no evidence that any attempts were made to help the students transfer the imagery ability outside the training situation.

What are the classroom implications? First, it's clear that

you will improve your students' comprehension of any given selection by simply instructing them to make mental pictures as they read that selection. It's not clear why this is so. It may simply be that pupils concentrate harder on materials they are reading when they try to make mental pictures from those materials. Or, it may be that, in the process of making mental pictures, pupils are formulating inferences beyond the literal level of the material and that these inferences, which are also part of the total comprehension that the author wanted the reader to have, would not have been made without the mental pictures. Whatever the reason, you can expect students to comprehend a given passage better when they're told to make mental pictures as they read it.

Second, it seems likely that this ability could be transferred so it becomes generally applicable in most of the materials that our students read. Provide for its use in the reading period, but don't limit it to the reading period alone. Remind your students to use it as they read in social studies, science, and other areas. If they've read some content material with limited comprehension, have them read it again, and have them make mental pictures as they read, so they, themselves, can see how their comprehension improves. Continued use in a variety of reading situations could significantly improve your students' abilities to read with comprehension.

A sixth approach to improving reading comprehension is to provide direct instruction for your pupils in understanding how connectives work in our language and the importance of paying attention to their use in the flow of printed language.

Jean Robertson (24) found that more than one-third of the sentences in a sample of basal readers covering all grades contained connectives. She also found a significant relationship between the understanding of connectives and reading comprehension for intermediate grade pupils. Stoodt (29) in a more recent study, also found a significantly positive correlation between children's reading comprehension and their comprehension of conjunctions.

Although there was not agreement between Robertson and Stoodt on just exactly which connectives caused the most trouble, the two researchers jointly list the following fourteen as the ones which merit the most attention: although, and, but, how, however, if, or, so, that, thus, where, which, while, and yet.

There could be numerous examples of how misreading or misunderstanding a connective could completely change the meaning of something we're reading. Suppose, for example, that someone had written this sentence about me, "He has been married for twenty-seven years and he still loves his wife." When you

read the connective and correctly, you get the meaning that the author intended. Notice how the meaning changes, though, if you misread or misunderstand the connective so that it comes out, "He has been married for twenty-seven years, but he still loves his wife," or "He has been married for twenty-seven years, however, he still loves his wife." The substitution of but or however for and doesn't change your understanding that I still love my wife, but it certainly strongly implies something about how other men who have been married for twenty-seven years feel about their wives.

What are the classroom implications of the research showing a high, positive correlation between our students' abilities to comprehend connectives and their general reading, comprehension abilities? It is that we should carefully and systematically provide direct instruction for our students in how a correct understanding of connectives can influence the accuracy of their reading comprehension.

Connectives or structure words should never be taught in isolation. The meanings they convey can only be fully understood in the context of sentences and paragraphs. Find some connectives in the materials that your students read for you and explore with them how the meaning for the material would be changed if we misread or misunderstood the connectives.

This comprehension of connectives in the materials that you are reading with them can transfer to understanding those connectives better in all reading that they do and, consequently, can improve their reading comprehension.

Summary

Let me try to pull this all together. Where have we been?

We know that the reader's ability to comprehend is not always within our hands. The ability to comprehend a given selection is influenced by the content of that selection as it relates to the reader's background of knowledge about that content. It's influenced by the author's ability to transcribe his or her thoughts into readable prose.

Despite such variables there are things that we can do which will improve reading comprehension. There are many that we have not had time to touch on today, such as specific strategies for teaching a reader how to select the topic or how to determine the main idea. But we have explored six specific suggestions which are supported by sound research. They will improve reading comprehension.

First, our students cannot comprehend if they lack the ability

to deal with the words in printed discourse. We must be sure that they have decoding skills to instantly translate the printed words into the meanings for which they stand. There is evidence that teaching them to use context as one vital part of the decoding process will result in improved comprehension.

Second, we can increase our students' depths of comprehension by triggering discussion of materials they have read with questions which call for them to make inferences from -- and evaluations of -- that material.

Third, we can improve reading comprehension by providing planned exercises in listening over a sustained period of time.

Fourth, we can improve reading comprehension -- particularly for students who are low achievers -- by providing cloze exercises and discussing with students the logic behind the choices of words that were made to fill-in the blanks.

Fifth, we can improve reading comprehension of any given reading selection by having students make mental images as they read. It seems probable, too, that this practice could be transferred so they would use it independently in most of the materials that they read.

Sixth, we can improve reading comprehension by providing planned instructional activities which help students understand connectives and how they influence meaning.

Try any or, better still, all of these. Research proves that your pupils will become better comprehenders of what they read if you do. And, after all, comprehension is what reading is all about.

Thomas Jefferson said, "People who read can be free because reading banishes fear and superstition."

The ability of our future generations to read, and, perhaps, then, to some extent, the ability of those generations to remain truly free rests in your hands. It's a monumental responsibility.

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